

REMARKS

By this Amendment, without conceding the propriety of the rejections and solely to advance and expedite prosecution, new dependent claims 14-20 have been added and claims 5, 9, 11 and 13 amended merely to further recite the claimed subject matter, correct typographical errors or provide consistency of dependency, without the intention of narrowing the scope of any of the claims. Applicant does not, by this amendment, intend to abandon subject matter of the claims as originally filed or later presented. Moreover, Applicant reserves the right to pursue such subject matter in a continuing application. No new matter has been added. Claims 1-20 are pending in this patent application. Reconsideration of the rejections in view of the remarks below is requested.

The Office Action objected to certain language in claims 5 and 9. Applicant has amended claims 5 and 9 to further recite the claimed subject matter without intention of narrowing the claims. Applicant submits that claim 5 is sufficiently clear that the magnets along the first direction have a same first polarity and the magnets along the second direction have a same second polarity, the first polarity being the same as or different than the second polarity. With respect to claim 9, Applicants refer to an embodiment depicted in Figure 9. Figure 9 shows an example two-dimensional Halbach array of magnets extending in the X and Y directions (as marked on Figure 9) comprising magnets 70,71 together with magnets that are magnetized perpendicular to the Z-direction 72,73,74,75. Gaps remaining between the magnets of the two-dimensional Halbach array are filled with square-shaped magnets 76,77. As can be seen in Figure 9, the square shaped magnets in each of the X and Y directions have the same polarity, e.g., S and N respectively in Figure 9. Depending on where the X and Y directions are positioned in Figure 9, the polarity of the square shaped magnets in the X direction may be the same as or different than the polarity of the square shaped magnets in the Y direction. For example, with the X and Y directions as shown in Figure 9, the polarity of the square shaped magnets in the X direction (S) is different than the polarity of the square shaped magnets in the Y direction (N). Thus, Applicant submits that claim 9 is sufficiently clear. Accordingly, Applicant respectfully submits that Examiner's claim objections have been resolved.

The Office Action rejected claims 1-3, 5, 7, 8 and 13 under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,097,114 to Hazelton ("Hazelton") in view of U.S. Patent No. 5,808,381 to Aoyama et al. ("Aoyama et al."). Applicant respectfully traverses the rejection, without prejudice.

Applicant respectfully submits that Hazelton and/or Aoyama et al. fail to disclose, teach or suggest a positioning device comprising *inter alia* a first part comprising a magnetic field distribution that periodically alternates in a first direction and in a second direction perpendicular to the first direction, wherein the magnetic field distribution is anisotropic with respect to said first and second directions as recited in independent claims 1 and 13. Therefore, Hazelton and/or Aoyama et al. fail to disclose, teach or suggest each and every feature recited by claims 1 and 13 and, as a result, cannot anticipate these claims nor render them obvious.

As admitted in the Office Action, Hazelton fails to disclose an anisotropic magnetic field distribution. To overcome this failing, the Office Action relies on Aoyama et al. Aoyama et al. disclose a linear motor having permanent magnet members and a polyphase coil moving relatively (see col. 1, lines 4-6) and further disclose that the permanent magnet members may be produced by known methods such as a sintering method, a casting method, a rapid quenching method, a resin bonding method, etc. (see col. 3, lines 15-18). More specifically, Aoyama et al. disclose that the permanent magnet members in the linear motor of Aoyama et al. may preferably be "anisotropic sintered magnets and resin-bonded magnets of Nd--Fe--B" which have "high energy products" (see col. 3, lines 28-31).

Without conceding the applicability of the linear motor teachings of Aoyama et al. to the two-dimensional positioning device of the present application, Applicant respectfully submits that Aoyama et al. fail to disclose, teach or suggest a magnetic field distribution that is anisotropic as claimed. Anisotropic magnets are magnets which can be more easily magnetized in one direction than another. Generally this results from techniques used during the production of magnets (e.g., pressing of the magnetic materials in the presence of a magnetic field to develop a strongly aligned crystalline structure) to yield magnets that have simpler but higher magnetic qualities with a direction of magnetization being able to be better controlled along a desired axis. However, anisotropic magnets do not necessarily have a magnetic field distribution that is anisotropic. Indeed, anisotropic magnets would typically have

isotropic magnetic fields, the anisotropic characteristic of the magnets simply providing higher magnetic strength compared to isotropic magnets providing an isotropic magnetic field. Accordingly, Aoyama et al.'s disclosure of anisotropic magnets fails to provide any disclosure, teaching or suggestion regarding a magnetic field distribution that is anisotropic as claimed.

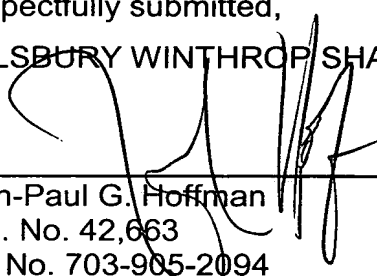
Claims 2-3, 5, 7 and 8 are patentable over Hazelton and/or Aoyama et al. at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Accordingly, for at least the above reasons, reconsideration and withdrawal of the rejection of claims 1-3, 5, 7, 8 and 13 under 35 U.S.C. §103 based Hazelton and/or Aoyama et al. are respectfully requested and the claims allowed.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. If questions relating to patentability remain, the Examiner is invited to contact the undersigned to discuss them.

Should any fees be due, please charge them to our deposit account no. 03-3975, under our order no. 081468/0306313. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced deposit account.

Respectfully submitted,
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